

**CELL MODELING IN THE DESIGN OF AN INTEGRATED CIRCUIT**

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**ABSTRACT**

5           The invention relates to a method for modeling an input/output cell located on the  
perimeter of an integrated circuit. A method is taught to model an the integrated circuit when  
sufficient area is not available on the perimeter of the integrated circuit. The input/output cell  
can be modeled in two locations; one location on the perimeter of the cell and a second  
location in the interior area, or core, of the integrated circuit. The model uses a cover to  
10 prevent the area of the core of the integrated circuit from being used for other purposes.  
When the input/output cell is divided into a main cell and more than one pre-cell, the model  
uses a cover for each pre-cell. The model adjusts the timing of the signals to compensate for  
the input/output cell being divided into two areas. In an embodiment a software tool  
performs the functions of the model.